

THOMAS DICK :

“THE CHRISTIAN PHILOSOPHER”

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IN the “personal sketch” forming the introduction to his *Missionary Travels and Researches in South Africa*, David Livingstone recorded that in boyhood “scientific works and books of travel were my special delight ; though my father, believing with many of his time who ought to have known better that the former were inimical to religion, would have preferred to see me poring over *The Cloud of Witnesses* or Boston’s *Fourfold State* . . . This dislike to religious reading continued for years ; but having lighted on those admirable works of Dr. Thomas Dick, *The Philosophy of Religion* and *The Philosophy of a Future State*, it was gratifying to find that he had enforced my own conviction that religion and science were friendly to each other.”¹

Who was this Dr. Thomas Dick ? Livingstone did not need to specify. His name was almost a household word in Scotland and far beyond Scotland in the middle of the nineteenth century. He was a man of science who was also a theologian—a somewhat unusual combination in those days. He was a prolific writer on the sciences—particularly on astronomy, on which subject he was a recognised expert—on the relations between science and religion, and on moral, social and educational questions. His books ran through many editions and were eagerly read by multitudes of thinking people. Yet to-day he is all but forgotten in the land of his birth and in the Kirk to which he belonged. More remarkable still, his name does not appear in some standard works where it surely ought to be mentioned. He is given no place in the list of distinguished authors listed in McKerrow’s *History of the Secession Church*. J. R. Fleming, in his invaluable history, did not refer to him as a writer on science and religion. J. Y. Simpson in his *Landmarks in the Conflict between Science and Religion* likewise passes him over. The only survey of the kind in which the significance of his work as scientist and theologian is recognised happens to be my own in *The Church and Science*, but his importance as a pioneer of popular education is stressed by Professor L. J. Saunders in his *Scottish Democracy*, which appeared after this paper was completed.

¹ pp. 3-4.

I

Thomas Dick was born in the Hilltown of Dundee on 24th November, 1774. He was the son of Mungo Dick, a linen manufacturer in a small way; his mother's maiden name was Margaret Sturrock. His parents were members of the Antiburgher branch of the Secession Church and his father was a prominent elder in Bell Street Church, Dundee. His mother appears to have been a well-educated as well as a pious woman, for according to the writer of the notice in Chambers' *Biographical Dictionary of Eminent Scotsman*—most probably The Rev. Thomas Thomson—she taught him his "letters," presumably reading and writing, and he was able to read the New Testament before he went to school.

From his earliest years he appears to have been a thoughtful child. He recorded that when about seven or eight years of age, "I sometimes looked out from a window in the day-time, with fixed attention on a pure azure sky and sometimes stretched myself on my back on a meadow or in a garden and looked up to the zenith to contemplate the blue ethereal. On such occasions a variety of strange ideas sometimes passed through my mind. I wondered how far the blue vault of heaven might extend—whether it was a solid transparent arch or empty space—what would be seen could I transport myself to the highest point I perceived; and what display the Almighty made of Himself in those regions so far removed from mortal view . . . I then entered into a train of enquiries as to what would have been the consequences had neither heaven nor earth been made, and had God alone existed in the boundless void. Why was the world created? What necessity was there why God Himself should have existed? And why was not all one vast blank devoid of matter and intelligence? My thoughts ran into wild confusion; they were overwhelming and they became even oppressive and painful, so as to induce me to put a check to them and hasten to my playful associates and amusements. But although my relations were more intelligent than many of their neighbours, I never thought of broaching such ideas or of making any enquiries of them respecting the objects which perplexed my thoughts; and although I had, it is not likely I should have received much satisfaction."¹

The lad's lifelong interest in astronomy dated from 18th August, 1783, when a brilliant meteor shot across the sky. He was in the garden of his father's house at the time and was so deeply impressed by the sight that he resolved to make himself conversant with both astronomy and meteorology. His parents, however, gave him no encouragement; but he saved

¹ *Celestial Scenery*, pp. 9-10.

enough money to buy an elementary book on science, which he read and re-read. His father had decided that the boy must follow his own line of business, and so he was removed from school and put to work at the loom. An attack of smallpox, followed by measles, laid him aside for some time, and during his convalescence he began to make rudimentary telescopes by fitting old spectacle lenses into pasteboard tubes. With these he began to make observations of the heavenly bodies. All this greatly distressed his parents. "He would never make his bread," they said, "by gazing at the stars."¹ His mother was particularly displeased, because the neighbours were laughing at her boy and suggesting that he was not mentally sound. When he was sixteen, however, his parents reconciled themselves to his determination to follow an academic rather than a business career and, released from the loom, he became a teacher in a school in Dundee.

In 1794 Dick went to Edinburgh and entered the University, supporting himself by private tuition. During the vacations he taught in schools in Edinburgh and Leven. He left the University without a degree, as many students did in those days. By the time he had finished his Arts course, he had decided to enter the ministry of his own branch of the Secession Church. It is doubtful if he felt at this time any real call to the ministry, for his interests seem to have been purely scientific. Clever lads of limited means were in those days restricted to two professions, the ministry and teaching, and though the average stipend of a secession minister was small, that of a schoolmaster was still smaller.

Whatever his motives may have been, he entered the Theological Hall of the General Associate—popularly known as the Antiburgher—Synod. The Rev. Archibald Bruce was then sole professor. He was minister at Whitburn in West Lothian, and the Hall met there daily at 12 noon except on Sundays. The curriculum consisted of five annual sessions of six weeks' length, but the students received intensive training, though the system of education was described as very "defective, especially in the work required from the students."²

Dick, who had for some time been teaching in the Orphans' Hospital in Edinburgh, was licensed in 1801, and according to both Thomas Thomson and William Anderson, he "officiated as a probationer"³ for some years in various parts of Scotland. As a matter of fact, he was called within two years to the Antiburgher congregation in Stirling and

¹ Anderson, biographical notice of Dick in *The Scottish Nation*, III, p. 705.

² McKerrow, *History of the Secession Church*, pp. 782-3.

³ Chambers' *Biographical Dictionary of Eminent Scotsmen*, I, p. 445; *The Scottish Nation*, III, p. 705.

ordained there on 30th November, 1803. Soon afterwards he was appointed Moderator of the Stirling Presbytery. But his ministry was brief ; it extended over just two years and a fortnight. He was deposed and excommunicated by the Presbytery on 17th December, 1805. It would seem that after his settlement at Stirling he suffered a complete breakdown, moral and spiritual, and probably in part mental as well. The sad story is detailed at length in the Presbytery minutes and it makes tragic reading ; for it records the seeming shipwreck of a promising career and the sufferings of a man groping for mercy in " the dark night of the soul."

What happened to Thomas Dick in these two brief years of his ministry we can only conjecture ; it may be that he had overworked himself as a student and a teacher and paid the price in the complete breakdown of his moral and mental faculties ; it may be, as I have already suggested, that he had never felt any real call to the ministry, for his early interests had been purely scientific and he may not have been in his student days what used to be called " spiritually-minded" ; it may be that his faith had temporarily collapsed under the impact of the new astronomy, and there is the further possibility that his approaching marriage may have been one of convenience and that when it took place it proved ungenial. We do not know which, if any, of these causes operated in bringing about his breakdown ; nowhere in any of his writings did he make any reference to such a period in his life, although in one passage in *The Philosophy of Religion*¹ the observant reader may " read between the lines " that the writer had himself passed through stress and strain. Had Dick written a candid autobiography, we might well have had a Scottish counterpart of the *Confessions* of St. Augustine ; but he preserved complete silence as to these years of his life and we can only speculate as to the cause and nature of his trouble. Whatever it was, he emerged from it a changed man, spiritually reborn and consecrated afresh. He informed the Presbytery on 2nd April, 1806, of his " great distress and perplexity of mind," and the Presbytery referred his case to the General Synod, which revoked the sentence of excommunication and restored him to full church membership. His career in the ministry, however, was at an end and he did not seek to return to it ; it was well for him that he did not, for he would most probably have been deposed a second time for what were accounted heretical opinions ; that is if he had followed the dictates of his conscience and written *The Christian Philosopher*. The church which in 1843 deposed James Morison for preaching a Universal Atonement would never have tolerated the writings of Thomas Dick.

¹ p. 614.

Although he probably did not realise it at the time, he stood on the threshold of a new life of great usefulness. That he was "a new creature in Christ" from 1806 onwards there can be no doubt; his writings testify to his earnestness of purpose, his zeal for truth, his passion for righteousness and his love for humanity; and his friends bore witness to his exemplary Christian life.

It was due to the kindness of a former colleague in the ministry that Dick's subsequent career—a long and honourable one—was made possible. In 1807 he accepted an invitation from the Rev. John Jameson¹ of Methven to take charge of the Secession School there. Methven has been described as "one of the strongest Seceding parishes in Scotland"² and the school of which Jameson and his Kirk Session formed the governing body was the chief educational establishment in the parish. Dick remained in Methven for ten years, when he exchanged it for an appointment in a Perth school where he remained for another decade. Then in 1827 he resigned in order to devote his time to authorship and scientific research.

His early interest in science, and particularly in astronomy, which appears to have been dormant in his student days, revived after he settled in Methven. He established a well-equipped observatory and used several telescopes, some of which were of his own construction. About 1820 he began experimenting on reflecting telescopes and devised a new type of instrument, without a tube. He fitted up several of these and was highly satisfied with their performance, stating that "the simplicity of the construction and the excellence of the performance of these instruments have been much admired by several scientific gentlemen to whom they have been exhibited."³ He added that he was contemplating taking out a patent for the construction of these "aerial reflectors," as he called them, but it does not appear that this project was ever realised.

With these and other instruments Dick carried through a series of observations on the planets. He drew attention to the fact that in the case of Venus in particular daylight observations were likely to be more rewarding than observations in the sunrise or sunset twilight. "I am of opinion," he wrote, "that future discoveries in relation to Venus

¹ Jameson was about the same age as Dick. George Gilfillan, whose friend he was, described him as "one of the uncrowned princes and unappreciated moral giants of our time," and a Seceding minister, David Nicol of Aberlady, referred to him as "the godliest man he ever knew."

² Small, *History of the Congregations of the United Presbyterian Church*, II, p. 621.

³ *The Christian Philosopher*, p. 527.

will be chiefly made in the daytime by large telescopes.”¹ The question of the length of the planet’s day, he urged, “may be settled by observations made on Venus in the day-time, by which in certain cases the progressive motion of her spots might be traced without interruption for 12 hours and more, which would completely settle the period of rotation.”² The suggestion went absolutely unheeded at the time and it was not until seventy years later that it was acted upon by Schiaparelli of Milan, one of the greatest astronomers of the last century. He was an independent discoverer of the great comet of 1811, and a careful and persistent observer of the Sun and its spots, of which he made many good drawings, and of the Moon and planets. He wrote extensively on astronomy in various magazines, among them the *Edinburgh Philosophical Journal*, the *Scots Magazine*, *Nicholson’s Philosophical Journal*, and the *London Monthly Magazine*. In two papers contributed to the latter periodical in 1818 and 1819, he drew attention to the need for new and better star-maps without the figures of mythological men and animals which, he maintained, confused and bewildered the student.

His work as an amateur astronomer was largely unnoticed at the time, and it was not until old age had overtaken him that he was elected a Fellow of the Royal Astronomical Society. Although astronomy was his special subject in which he did original work, he was well versed in all the branches of science, and he devoted a considerable amount of thought and research to applied science and its bearing on the material progress of mankind. Although he did not foresee the exact technique, he did forecast with amazing accuracy the invention of the telephone and also of broadcasting, in these prophetic words, “A person at one end of a large city, at an appointed hour, might communicate a message or hold a conversation with a friend at another . . . A clergyman sitting in his own room in Edinburgh, were it at any time expedient, might address a congregation in Musselburgh or Dalkeith or even in Glasgow. He might preach the same sermon to his own church and the next hour to an assembly at forty miles distant. And surely there could be no valid objection to trying the effect of an invisible preacher on a Christian audience.” “In short, intelligence respecting every important discovery, occurrence and event might thus be communicated through the extent of a whole kingdom within the space of an hour after it had taken place.”³

These were remarkable forecasts, and the fact that Dick conceived this realisation by means of “acoustic tunnels” rather than by radio waves—then quite unknown—does not detract from his almost uncanny

¹ *Celestial Scenery*, p. 80.

² *The Christian Philosopher*, p. 279.

³ *Ibid.*, pp. 421-2.

gift of prophecy. His other forecast of aerial transport by means of "balloons constructed with an apparatus for directing their motions"¹ was equally remarkable. In this way, he believed, countries hitherto inaccessible would be surveyed and explored and "messengers of peace and salvation"—Christian missionaries—would be able to descend upon unknown tribes from the region of the clouds.²

From an early age Dick had been keenly interested in what he called "the diffusion of knowledge." In five papers contributed to the *London Monthly Magazine* in 1814 and 1815 he recommended the establishment of "literary and philosophical societies adapted to the middling and lower ranks of the community." Such societies, he believed, would not only "unite and concentrate the scattered rays of genius," but would result in the diffusion of useful information among the mass of the people by means of lectures, debates, experiments, and the writing and reading of essays. At Methven he put his theories into practice. As schoolmaster there he took the leading part in founding one of the first of these institutions which came to be designated, somewhat inappropriately, as "Mechanics' Institutes." These provided opportunities of debate and discussion of vital questions and played an honourable part in raising the level of public intelligence. Such institutions, which were very numerous in Scotland about a century ago, were generally provided with well-stocked libraries, which contained among other volumes the works of Thomas Dick.

The first and best-known of these was written after Dick had removed to Perth and was published in 1823, when he was close on fifty. It bore the title of *The Christian Philosopher, or the Connexion of Science and Philosophy with Religion*. Within five years it went through four editions, and the twelfth edition appeared in 1842. It was plain that a thinker of unusual originality had made his appearance, and for some reason or other the name of his book became his popular appellation. The book's aim was to show that science and religion, so far from being in opposition to each other, were in fact in close agreement. It is not surprising that it was eagerly read by great numbers of people, mostly young men who were disturbed in mind over this very question.

When Dick finally gave up teaching in 1827 he returned to his native city of Dundee. He decided to settle at Broughty Ferry, where he bought a site on the top of the hill overlooking the Tay ; on it he had specially built what has been described as "a neat little cottage" and was named by him "The Observatory." Thomas Thomson states that the plot of ground on which this cottage was erected "was so barren that nothing

¹ *The Christian Philosopher*, pp. 421-2. ² *Ibid.*, p. 413.

would grow on it until he had laid eight thousand wheel-barrow-loads of fresh soil upon it—and as for the house, it had a room at the top of it with openings to the four cardinal points and fitted up as an observatory, in which were placed his books and philosophical instruments. The rustics gazed in astonishment at the house erected in so high and bleak a region and at the observatory surmounting the whole, and at last concluded that his principal wish was to dwell near the stars.”¹

Just before he left Perth he completed his second book, *The Philosophy of Religion, or an Illustration of the Moral Laws of the Universe* (1826). This book attracted almost as much attention as its predecessor, and still further enhanced its author's reputation. It had many successors. From “The Observatory” at Broughty Ferry there issued a stream of volumes in rapid succession: *The Philosophy of a Future State* (1828); *The Improvement of Society by the Diffusion of Knowledge* (1833); *The Mental Illumination and Moral Improvement of Mankind* (1836); *Christian Beneficence Contrasted with Covetousness* (1838). These were followed by two books on Astronomy: *Celestial Scenery or the Wonders of the Planetary System Displayed* (1838) and *The Sidereal Heavens and other Subjects connected with Astronomy* (1840). These two volumes at once took their place as authoritative works on astronomy, useful to the practical astronomer and yet simple enough to be understood by the general reader of ordinary intelligence. They had a wide circulation, not only in Great Britain but also in America. They were followed by smaller works on *The Practical Astronomer* (1845), *The Solar System* (1846), *The Atmosphere and Atmospheric Phenomena* (1848) and *The Telescope and Microscope* (1851). The first eleven of these were re-issued just after his death in a two-volume edition, published in Cincinnati, U.S.A. They had indeed an even wider circle of readers in America than in Great Britain, and it was an American University—Union Theological College, New York—which conferred on him the degree of LL.D.

Dick's life at Broughty Ferry seems to have been singularly uneventful, almost wholly devoted to scientific and literary work. Apparently he only once made a journey across the Border. He went to London in 1837 and crossed over to France, spending some time in Paris, where he visited the observatories and colleges; and he returned to Scotland by way of Cambridge. He enjoyed good health until 1849, when he had a serious illness followed by a severe surgical operation. He was then in his seventy-sixth year, and never fully recovered from its effects. His declining years were clouded over by financial anxieties, for he derived little profit from the sale of his books. “My writings,” he said, “have

¹ *Eminent Scotsmen*, I, p. 446.

not produced so much pecuniary compensation as some have supposed, notwithstanding they have had a pretty extensive sale in this country and much more in America. For the entire copyright of *The Christian Philosopher*, which has passed through more than ten editions, I received only £120, while the publisher must have realised at least about £2,000 on this volume alone, and I have no further claim to any further compensation. For the copyright of *The Philosophy of a Future State*, which has gone through four or five editions, I received only £80 and a few copies. For *The Practical Astronomer* I received fifty guineas, and so of the rest ; some larger and some smaller sums."¹

The spectacle of a revered old man, whose name was a household word in Scotland and beyond, sinking into destitution emboldened his friends and admirers in Dundee and elsewhere in 1846 to petition the Government to award him a Civil List Pension. The attempt did not succeed, but it was renewed in the following year and this time it was successful. He was awarded a small annual pension of £50 per annum. To augment this a public subscription was opened and for the remainder of his life he received from this source another small pension of between £20 and £30 yearly.

His closing years were brightened by his election on 14th January, 1853, as a Fellow of the Royal Astronomical Society, and he contributed to the Society in 1855 a paper on "Celestial Day Observations." In the following year he wrote a preface to a popular book on science by an American author, M. S. De Vere, entitled *Leaves from the Book of Nature*. But the end was now near at hand. He died after an illness of five days' duration on 29th July, 1857, in his eighty-third year. The death certificate gives the place of his death as "The Observatory, Broughty Ferry." He was interred in the "New Burying-Ground" there.

Dick's first wife was a sister of the Rev. Andrew Aedie, of Forfar. After her death he married in 1830 Mrs. Davidson, the daughter of Dr. Young, minister in Hawick ; her first husband, Alexander Davidson, a lecturer on science, had died four years previously. The second Mrs. Dick shared her husband's scientific tastes and must have been a great help to him. She was described as "well known for her acquisition in experimental philosophy and chemistry and for the elegance with which she conducted experiments on these subjects."² She died in 1840. Dick was survived by at least one son, "Thomas Dick, Jnr.," who registered

¹ Quoted by Anderson, *The Scottish Nation*, III, p. 706.

² Small, *History of the Congregations of the United Presbyterian Church*, III, pp. 671-2.

his father's death. Whether he was an only child, or whether he was the son of the first or second Mrs. Dick, I have been unable to ascertain.

An American clergyman said of Thomas Dick that he "brought down philosophy from heaven to earth, but raised it from earth to heaven."¹ and a young Dundee man who took part in the agitation for a pension for the aged author described him as "a man over whose eloquent pages millions in this country, in Europe and America, have hung with rapture and pondered with profit, . . . the man who has done more than any other man we know to popularise science among the people . . . Dr. Dick has lived a long and laborious life, writing books which have done much good to men. He has lived with the moderation and meekness of a saint, as he has written with the wisdom of a sage."²

II

Thomas Dick's works are not to us of to-day particularly easy reading. He had a fine literary style and attained at times to flights of real eloquence; but he tended to long and involved sentences, heavily loaded with Scripture quotations, and he was in addition verbose and given to repetition by way of emphasis. Yet all of his books are well worth reading, for they are the outpourings of a fresh, well-stored, original mind. The man's transparent sincerity is apparent in everything he wrote; so is his genuine personal piety. Even when dealing with purely scientific facts or figures, such as the distance or number of the stars, he stops to bid the reader wonder and adore. A passage like this is typical of many others: "Overwhelmed with a view of the magnificence of the Universe and of the perfections of its Almighty Author, we can only fall prostrate in deep humility and exclaim, "Great and marvellous are Thy works, Lord God Almighty."³

Dick maintained as strongly as the Psalmist that "the heavens declare the glory of God" and equally strongly with the poet that "an undevout astronomer is mad." His convictions were those of one who accepted wholeheartedly the vast extension of the Universe in both space and time which was the inescapable deduction from the life-work of William Herschel. Despite the devout spirit in which Herschel scanned the heavens with his great telescopes and his own simple piety, his demonstra-

¹ Anderson, *The Scottish Nation*, III, p. 706.

² Peter Livingston, in a letter to the press, re-printed in *Poems and Songs*.

³ *The Sidereal Heavens*, p. 434.

tions of the immensity of the Universe had had an unsettling effect on many minds. The thought of

"This interminable wilderness
Of worlds at whose immensity
Even soaring fancy staggers"¹

had bludgeoned other young men besides the youthful Shelley into a mood of agnosticism, if not of atheism. "When I consider Thy heavens . . . what is man that Thou art mindful of him?" became a pertinent question. Thomas Chalmers attempted with considerable success to deal with the doubts and questionings of anxious minds, and his *Astronomical Discourses* had an immense influence for many years after they appeared in book form. But Chalmers was not a man of science; he was a systematic theologian of wide culture and broad outlook, but his knowledge of science was not at firsthand. Dick must certainly have read the *Discourses* and they may well have inspired him to attempt something better. He had only a slight personal acquaintance with Chalmers, but in dedicating to him his *Philosophy of a Future State* he mentioned his appreciation of Chalmers' interest in his own work "in endeavouring to connect science with religion." The two men were thinking along parallel lines; but of the two Dick was much better qualified to deal with the subject, for he was a practical scientist as well as a trained theologian.

"It may be laid down as a universal principle," wrote Dick, "that there can be no real discrepancy between a just interpretation of Scripture and the facts of physical science; and on this principle the following canon is founded which may be considered as an infallible rule for Scripture-interpretation; namely, that no interpretation of Scripture is to be admitted which is inconsistent with any well-authenticated facts in the material world. . . . Such facts when ascertained ought to be considered as a revelation from God as well as the declaration of His Word." From this general principle Dick deduced that "where a passage of Scripture is of doubtful meaning or capable of different interpretations that interpretation ought to be preferred which will best agree with the established results of science. For since the Author of revelation and the Author of universal nature is one and the same Infinite Being there must exist a most complete harmony between the revelations of His Word and the facts or relations which are observed in the material Universe."²

Dick strongly criticised the attitude of "certain theologians, whose practice has long been to depreciate the wonderful works of Jehovah." "In their way, to be a bad philosopher is the surest way to become a

¹ Shelley, *Queen Mab*.

² *The Christian Philosopher*, p. 432

good Christian and to expand the views of the human mind is to endanger Christianity.”¹ Such an attitude he characterised as “both foolish and impious.” “It becomes us to contemplate with adoring gratitude every ray of our Creator’s glory whether as emanating from the light of revelation or as reflected from the scenery of Nature around us or as descending from those regions where stars unnumbered shine and planets and comets run their solemn rounds.”² And so he concluded that “the enlightened Christian ought thankfully to appreciate every exhibition and every discovery by which his conceptions of the attributes of God and of the grandeur of His works may be directed and enlarged, in order that he may be qualified to speak of the honour of His majesty and talk of His power ; to make known to the sons of men His mighty acts and the glorious majesty of His kingdom.”³

In the appendix to *The Christian Philosopher* Dick referred to “vague and untenable notions which are entertained and reiterated by certain commentators and divines as indisputable axioms” and which ought to be discarded. Among these he mentioned “that the whole material Universe was brought into existence at the same time with our Earth—that the Creator ceased to create any new order of beings in the Universe after arranging the fabric of our globe, that the whole system of material nature in heaven and earth will be destroyed at the period of the dissolution of our world.” He protested strongly too against the idea which he said had been reiterated a thousand times in sermons and systems of divinity ; that “there never was, nor ever will be, through all the ages of eternity so wonderful a display of the Divine glory as in the Cross of Christ.” Certainly, Dick maintained, it is a matter of “grateful adoration” that God “condescended to regard us in our low estate and to deliver us from the moral degradation into which we had fallen ; but surely it would be unreasonable to conclude from this consideration that of all the rational tribes which people the Universe, man is the only favourite of the Most High.”⁴ The doctrine of the plurality of inhabited worlds was one of whose truth Dick was sincerely convinced. It had become increasingly popular in scientific circles in the eighteenth century ; Herschel had lent to it the weight of his authority and other famous astronomers and men of science generally had accepted it with enthusiasm. Sir David Brewster, an illustrious scientist, had written a book in its defence ; Thomas Chalmers, from the theological standpoint, had declared in its favour. But it was unpopular in orthodox religious circles, where it was thought to be irreconcilable with the accepted dogmas of the Church. Dick devoted much space in several of his books to showing that it was

¹ *The Christian Philosopher*, pp. 24-25.

² *Ibid.*, p. 25.

³ *Ibid.*, p. 30.

⁴ *Ibid.*, p. 534.

not merely not inconsistent with Christianity but rather the reverse. Indeed he attempted by somewhat violent exegesis to extract the doctrine from the Book of Nehemiah ; for he quoted the verse "the host of heaven worshippeth Thee" (Nehemiah ix, 6) to prove that the "language of Scripture is not only consistent with the doctrine of a plurality of worlds, but evidently supposes their existence to all the extent to which the discoveries of modern science can carry us."¹ Occasionally he allowed his imagination to run riot, as when he solemnly computed the population of the planet Mercury !² One particular difficulty was felt by many orthodox people, namely, if other worlds were inhabited, what became of the doctrine of the Atonement ? Did Christ's death on the Cross suffice for all these extra-terrestrial beings or did He appear on other planets to make similar sacrifices there ? These difficulties were dealt with by Chalmers and Brewster, but Dick nowhere expresses any dogmatic opinion. It would appear that while he was disposed to believe that the inhabitants of most of the other worlds had not fallen from a state of primeval rectitude, he also believed that on a certain number of planets, among which he would appear to have included Mars,³ a "fall" had taken place. In any case he regarded the Atonement as possessing a terrestrial but not a cosmic significance. He was content, on this as on other matters, to take refuge in a "reverent agnosticism," realising that this question, like many others, was beyond the finite intelligence of man.

Dick died two years before Darwin's *Origin of Species* was published ; and so in his time the great evolution controversy had not really begun. The idea of evolution was, of course, "in the air." Laplace's nebular hypothesis was well known ; and was repudiated with horror by most theologians. Even Herschel, devout Christian believer as he was, was charged with impiety for suggesting that the stars had evolved from nebulous matter, and after his death his son was obliged to defend his memory from the charge of infidelity.⁴ Many devout men of science, such as Brewster, rejected the nebular hypothesis on religious grounds. Dick's judgment was cautious and balanced. He rejected outright the idea that only six thousand years had elapsed since the Creation. Referring to Herschel's observations on distant stars and nebulae, he pointed out that light would require 30,000 years to travel from these objects to the Earth ; and he maintained that the first verse of the first chapter of Genesis "being of a general and comprehensive nature decides nothing with regard to the period or precise epoch at which the different bodies

¹ *The Christian Philosopher*, p. 306.

² *Celestial Scenery*, p. 57. ³ *Ibid.*, pp. 122, 356.

⁴ Lubbock, *The Herschel Chronicle*, p. 197.

in the Universe were called into being. . . . As the language of the sacred historian, therefore, decides nothing with regard to time, to limit the creation of the material system within the period of 6,000 years is to make an unnecessary concession to the infidel philosopher."¹

Having rejected the orthodox estimate of the age of the Universe, it was easy for Dick to regard the evolution theory of nebulae into stars with some degree of sympathy. The hypothesis, he wrote, is "not inconsistent with what we know of the attributes and operations of the Almighty."²

Dick's "natural theology" had many affinities with the thought of Paley, whom he quotes more than once. He maintained that the marvelous adaptation of means to ends indicated, indeed proved, the existence of an Infinite Intelligence. He drew his arguments not only from astronomy but from geology, meteorology, chemistry and other sciences. The aesthetic argument, too, made a strong appeal to him. "On all sides," he wrote, "we behold a rich variety of beauty and magnificence"; and in order that this may be rendered visible, God "formed the element of light" which "opens to our view the mountains, the hills, the vales, the woods, the lawns, the flocks and herds, the wonders of the mighty deep and the radiant orbs of heaven."³ But all this beauty would be unperceived by mankind were it not for the wonder of human vision. He expatiates at length in his writings on the marvels of animate life and the structure of the human body, "the organs of sense, the process of respiration, and the circulation of the blood through the whole frame every four minutes." In an impressive passage appended as a footnote he draws attention to the miracle of human birth—the pre-natal development of the infant as described in Psalm 139, 13-16, remarking that "in our translation the beauty and emphasis of this passage are partly lost," and amending the A.V. translation in anticipation of modern scholarship.⁴

Dick's natural theology might be described as the theology of creative immanence. "And if the train of our thoughts were directed in its proper channel, we would perceive God in every object and in every movement; we would behold Him operating in the whirlwind and in the storm; in the subterraneous cavern and in the depths of the ocean; in the gentle rain and in the lightning's flash; in the splendours of the Sun and the majestic movements of the heavens; in the frisking of the lambs, the

¹ *The Christian Philosopher*, p. 258.

² *The Sidereal Heavens*, p. 271.

³ *The Philosophy of Religion*, pp. 52-53.

⁴ *The Improvement of Society*, pp. 381-2.

songs of birds and the buzz of insects ; in the circulation of our blood, the movements of our joints, the motion of our eyeballs and in the rays of light which are continually darting from surrounding objects for the purposes of vision. For these and ten thousand other agencies in the system of nature are nothing else but the voice of the Deity proclaiming to the sons of men, in silent but emphatic language—"Stand still and consider the wonderful works of God."¹

David Livingstone, as already stated, put it on record that he owed to Dick the confirmation of his own feeling that science and religion were not really mutually antagonistic but friendly. And Livingstone was only one of a very great number of young people, and older people also, who were indebted to Dick for a similar service. For many years the "Christian Philosopher" devoted his well-stored mind, his acute reasoning powers and his untiring pen to the cause, among others, of reconciling science and religion ; and for this he deserves an honourable place in the history of his country and of the world.

III

Though he held fast by the doctrine of verbal inspiration and the main articles of the Christian faith, Dick was in his day what would be called a liberal thinker ; for not only did he express views at variance with the Westminster Confession, he strongly criticised the theologians of the time for their narrowness and dogmatism, and his attitude to Christian unity was far in advance of his day.

"We must," he wrote in 1833, "discard the greater part of those human systems of divinity and those polemical writings and controversies which have fanned the flames of animosity and which have so frequently been substituted in room of the oracles of God . . . We must also endeavour to discard the 'vain janglings,' the sophistical reasonings and the metaphysical refinements of the schools and the technical terms of polemical theology such as *trinity*, *hypostatical union*, *sacraments*, *orthodoxy*, *heterodoxy*, etc., and in our discussions especially on mysterious or doubtful subjects adhere as nearly as possible to the inspired writers. In particular, more attention ought to be paid to the manifestation of Christian love and the practice of religion than to a mere coincidence of view with regard to certain theological dogmas."² In a footnote Dick safeguarded himself against possible misrepresentation. "In discarding the use of such terms

¹ *The Christian Philosopher*, p. 201.

² *The Improvement of Society*, pp. 430-1.

as these, the author is not to be considered as setting aside the truths usually designated by them." This might be looked on as a reassurance to the orthodox, but he qualified it by adding, "his intention being merely to recommend the adoption of Scriptural phraseology, more especially in regard to subjects which lie beyond the reach of human comprehension and which cannot be clearly and adequately expressed by technical terms of human invention."

In his *Philosophy of Religion* Dick dealt very severely with the "many boisterous and malignant disputes" between various Protestant sects "respecting the speculative points in which they disagree," and with the polemical controversialist doing all in his power to discredit his antagonist. "Woe to religion," Dick commented, "when it meets with such boisterous wrestlers! Its true glory will be betrayed, its beauty defaced, its interests betrayed and its benevolent spirit smothered, amidst the smoke and dust raised by the onsets of such angry combatants. . . . What a contrast to the mild and gentle spirit of Christianity to behold one zealot dipping his own pen in wormwood and gall when he sits down to defend the religion of love." And he reminded his readers that "there are heresies in conduct as well as heresies in doctrine, and of all heresies the former are the most pestilential and pernicious."¹

Dick was careful in all his own writings to avoid the least trace of personal bitterness or animosity even when denouncing those very tendencies and attitudes which so deeply grieved him. The Roman Catholic polity and doctrinal system had no stronger antagonist than he; yet in the course of an indictment of Popery as "a system founded on the darkness and imbecility of the human intellect," he was careful to add a footnote to this effect: "Let it be carefully remembered that in these remarks it is merely the system of Popery to which the author refers. He is aware that many individuals, distinguished for learning and piety, have been connected with the Roman Church; and while he condemns the spirit and tendency of the peculiar dogmas and practices of that church, he deprecates every idea of persecution and every attempt to deprive its members of those rights and privileges to which they are entitled as men and citizens."²

Dick returns again and again in the course of his writings to the spirit of intolerance and persecution. "It is the height of absurdity," he declared, "to enforce belief in any doctrine or tenet by the application of physical power, for it never can produce the intended effect. . . . And

¹ *Philosophy of Religion*, pp. 581-2.

² *Improvement of Society*, p. 13.

if men had not acted like fools and idiots as well as like demons, such a force in such cases would never have been applied."¹

The use of uncontrolled force, the application of violent coercion accompanied by cruelty, was abhorrent to Dick whether manifested within the Church or the State or between warring nations. He condemned the institution of war as a method of settling disputes between nations. Because his condemnation was unqualified, because he never tried to find excuses for particular wars, Dick's attitude on this question may perhaps be described by the somewhat loose term of "pacifism," indeed of absolute Christian pacifism. "In modern times," he said, "it is an indelible disgrace to nations who designate themselves as civilised and enlightened that such a mode of settling disputes between states and empires should be resorted to." He stressed the absurdity of it; "for it can never decide on which side a disputed question justice and right are to be found."² But the futility of war was only one of the counts and by no means the most important of his indictment. War, he said, includes "everything that is base and execrable in moral conduct and subversive of the spirit of benevolence; everything that is destructive of human enjoyment, that rouses the passions into diabolical fury and adds to the sum of human wretchedness, everything that is oppressive, cruel and unjust, and everything that is dreadful and appalling to mankind."³ Further, war "extirpates every principle of compassion, humanity and justice, blunts the feelings and hardens the heart."⁴

Second only to war in atrocity, Dick placed the slave trade, still lingering on in the first half of the century. He reflected sadly that this "infernal traffic" resulting in the death or enslavement of 20 million negroes "has been encouraged and carried on by men who make high profession of their improvement in science and civilisation."⁵ Further, he denounced the penal codes of civilised nations as "deeply imbued with a spirit of cruelty and revenge." "The present system of our prison discipline, instead of operating to prevent the increase of crime, has a direct and inevitable tendency to produce vice and wretchedness and to render our jails the nurseries of every depraved propensity and of every species of moral turpitude";⁶ and he quoted Howard and Buxton to reinforce his argument. That he had his doubts as to whether capital punishment is ever justified is evident from a footnote to his analysis of the sixth commandment.⁷ He dealt also with lesser manifestations of

¹ *Improvement of Society*, p. 406.

² *The Solar System*, II, p. 13.

³ *Philosophy of Religion*, p. 412. ⁴ *Ibid.*, p. 424.

⁵ *Christian Beneficence*, p. 29.

⁶ *Philosophy of Religion*, p. 523. ⁷ *Ibid.*, p. 323.

human depravity. The matter of juvenile delinquency concerned him greatly and he was roused to indignation by cruelty to animals, both domestic and wild,¹ under which head he included blood-sports and shooting. On page after page we come on the forcible expression of his detestation of "man's inhumanity to man" and towards the lower animals as well.

Dick deserves honourable mention among those, like Chalmers, Guthrie, Begg and others, who demanded social reform in the name of Christ. He hailed the material progress of the early nineteenth century as good in so far as it ministered to human wellbeing. The making of railways and canals, the erection of better houses, and the new interest in public health were all regarded by him as signs of progress. But there were many features of society which called forth his condemnation. At a time when infantile mortality was passively accepted by many religious people as "the will of God" and by secular writers as a necessity of nature to prevent over-population, Dick protested against the quite unnecessary loss of infant and child life. He found the chief causes in bad housing and contaminated air as well as in parental ignorance and folly. He expressed strong and revolutionary views concerning the feeding and clothing of young infants and unsparingly denounced the common practice of "loading them and binding them with clothes equal to their own weight."² He was deeply concerned about the condition of "the lower orders of society." "If we look into our cities and towns," he declared, "we shall find them abounding with many nuisances and inconveniences—narrow streets, dirty lanes, wretched cellars and hovels crowded with human beings, whole families with their miserable shreds of furniture cooped up in one narrow apartment amidst gloom, filth and disorder—no conveniences for washing, bleaching, or for enjoying the cheerful light of heaven and the refreshing breeze." Thus "numerous diseases are engendered, the true enjoyment of life prevented and the period of human existence cut short by nearly the one-half of its average duration." Even in "many of our villages," he said, "there are similar evils tending to human wretchedness and debasement."³

Such conditions, whether in town or country, seemed to Dick to be destructive of home life and to lead to all kinds of vices. "In order that the labourer may be stimulated to the cultivation of his mental powers, he must be furnished with those domestic conveniences requisite for attaining this object." Dick was, of course, an ardent believer in the

¹ *Philosophy of Religion*, p. 506.

² *Improvement of Society*, ., 67.

³ *Christian Beneficence*, p. 236.

improvement of the mind ; and he rightly pointed out that people could not improve their minds in overcrowded one-roomed houses. The labourer, he said, "must be paid such wages as will enable him to procure such conveniences and the means of instruction. The long hours of labour and the paltry remuneration which the labourer receives in many of our spinning-mills and other manufactories, so long as such domestic slavery and avaricious practices continue, form an insurmountable barrier to the general diffusion of knowledge."¹

He saw clearly, as did so many Christian men of his day, that while bad housing and low wages were potent causes of ignorance and unhappiness, intemperance was another. "Wherever intemperance prevails," he wrote, "a barrier is interposed to every attempt for raising man from the state of moral and intellectual degradation into which he had sunk."²

Although Dick may well be claimed as a pioneer of social reform, he cannot be labelled as in any sense a revolutionary, nor can he be cited as in sympathy with such movements as Chartism. His repudiation of violence interposed a gulf between him and those who advocated such methods of redressing grievances and injustices as rioting, arson and strikes. Although he rightly blamed the absolutism of the Bourbons for precipitating the French Revolution, he was under no illusions as to the way in which that revolution was carried out and he was unsparing in his condemnation of its excesses. The ideal of a classless society made no appeal to him. He explicitly said so. "Gradation in society," he regarded as "the appointment of God."³ There must, in his view, be diversity of station, and the great social evils are due not to such diversity but to the influence of a spirit of pride on one hand and of insubordination on the other."

IV

In one of his lesser-known volumes, *Christian Beneficence Contrasted with Covetousness* (1836), Dick specified two reasons for the ills of society. The first was the declension of the Christian religion from its primitive standards and its consequent loss of influence. "Even since the time of the Reformation from Popery it is amazing how little practical influence Christianity has obtained over the nations who profess to have submitted to its authority." The chief reason for this Dick traced to the fact that the great majority of people have paid more attention to its theory than

¹ *Improvement of Society*, pp. 225-6. ² *Ibid.*, pp. 68-9.

³ *Philosophy of Religion*, p. 144.

to its practice. Theological controversies have taken the place of piety and godliness. "No nation under heaven has yet recognised its principles and maxims, in all their extent, in its civil and criminal code, in its legislative enactments, in its colonial transactions and in its intercourse with other nations. No Christian church has yet been formed on the principle of a full and unreserved recognition of its precepts and laws in all their bearings and practical applications, and even the most exemplary Christians in their general deportment and particularly in the application of their wealth, fall far short of what the religion of the Bible inculcates."¹ He admitted that there were to be found certain societies of Christians "where the principle of benevolence, in a greater or less degree, pervades the whole mass," and he instanced specifically the Quakers and Moravians. "Would to God," exclaimed the old Seceder, "that the whole world were Quakers and Moravians, notwithstanding their peculiarities of opinion! With all their foibles and imperfections, society would then wear a more beautiful and alluring aspect than it has ever yet done; peace and industry would be promoted; the fires of persecution would be quenched; philanthropy would go forth among the nations, distributing a thousand blessings, and the people would learn war no more."²

So much for the negative cause of the world's ills—the weakness and faltering witness of organised Christianity. Dick recognised a second positive cause, which he summed up in the one word—"covetousness." This root evil—the cause of the greater part of human misery—could only be met, he maintained, by applying "certain principles of moral action." Following St. Paul, and anticipating Henry Drummond, he acknowledged love as "the greatest thing in the world." So he took as his "first principle of moral action love to God,"³ and the second "love to all subordinate intelligences"—"men of every nation and of every clime, whether they avow themselves as our friends or our enemies and whatever be their language, their religion, their rank or station."⁴ Further, love ought to take in the animal creation as well. "We should not only abstain from torturing them and unnecessarily depriving them of existence, but should endeavour to promote their enjoyment."⁵

Love is a cosmic principle. In an ingenious argument he likens love to the moral sphere to the "attraction of gravitation" in the material Universe. Just as gravity holds the material Universe together, so love unites man to man and mankind to God.⁶ "There is but one religion

¹ *Christian Beneficence*, pp. 15-16.

² *Philosophy of Religion*, pp. 603-4.

³ *Ibid.*, p. 37.

⁴ *Ibid.*, p. 131.

⁵ *Ibid.*, p. 263.

⁶ *Ibid.*, pp. 215-6.

throughout the Universe, however vast its magnitude and boundless its extension."¹ But this religion Dick did not find in any existing Christian community. The perfect religion, genuine Christianity, would produce "love, brotherly affection, forgiveness of injuries, peace and harmony, philanthropy, temperance, charity, and a spirit of noble generosity."² Taking his stand on the prophetic writings, Dick firmly believed that peace and brotherhood would ultimately triumph "when the moral machinery calculated to effect the object shall be set in motion."³ This moral machinery would of course include world-evangelisation. Dick was a fervent believer in foreign missionary work, but he believed that only a united church could evangelise the world. He had no place for divisive sectarianism. "A merging of party differences and a consequent union of enlightened Christians would dissipate that spirit of trifling in religion by which so much time has been absorbed in discussing sectarian opinions to the neglect of the great objects of the Christian faith. . . . It would have a powerful influence on the propagation of Christianity throughout the heathen world; for the whole Christian world would then become one grand missionary society."⁴ To prepare the way for Christian unity, Dick suggested that "enlightened ministers of different denominations should occasionally exchange pulpits." "What a disgrace to the Christian name that such a friendly intercourse has never yet been established; or when it occasionally happens, that it should be considered as an extraordinary and unlooked-for phenomenon."⁵

"Peace and unity in the church," said Dick, "would have a tendency to promote peace and friendship among nations."⁶ The kind of peace and unity which he envisaged was of a thoroughgoing kind: it was a peace and unity not only between white races, nominally Christian, but embracing people of every race and colour. He actually looked forward to the complete abolition of the colour bar, and looked with favour on possible intermarriage between persons of different race and colour "to reunite the human family," so long disunited on account of national prejudices and antipathies as well as "climate and complexion."⁷ "Are we not," he asked, "all brethren of one family? Have we not all one Father? Has not one God created us? Does not the same planet support us and the same atmosphere surround us? Does not the same Sun cheer and enlighten us? Have we not the same physical organisation, the same mental powers, and the same immortal destination?"⁸

¹ *Philosophy of Religion*, p. 212.

² *Christian Beneficence*, p. 17.

³ *Improvement of Society*, p. 412.

⁹ *Ibid.*, p. 437.

⁴ *Ibid.*, p. 436.

⁷ *Ibid.*, p. 419.

⁵ *Ibid.*, pp. 440-1.

⁶ *Ibid.*, pp. 420-1.

The pulpit, Dick maintained, had a vital part to play in the evangelisation of the world. He was not at all satisfied with the dogmatic preaching which was prevalent in his time. He objected to "metaphysical disquisitions respecting dogmas in religion." Certain fundamental axioms certainly ought always to be recognised and kept in view—such as the existence of God, the divinity of Christ, the sinfulness of man, the need of salvation and redemption through the Saviour. But, he maintained, "there is no necessity for expatiation almost exclusively on these and similar doctrines as is frequently done to the exclusion of practical morality."¹ They should be accepted as "first principles in religion," not as topics to be proved by laboured arguments. In an eloquent and lengthy passage, he pled for the application of "the touchstone of the Divine law . . . to show how the principle of love ought to operate in every case and circumstance and in the minutest details of human life."²

Finally Dick laid great stress on the mighty changes for good which would be wrought by what he called the "dissemination of knowledge." In common with many social reformers of last century, he would seem to have over-estimated the capacity of the masses of mankind for serious thinking and sustained study. He presupposed a capacity for amassing knowledge nearly equal to his own. He displayed, too, a certain narrowness of view as to the nature of useful knowledge. His polemic against fiction, from nursery tales to the Waverley novels, is scarcely in keeping with his general attitude of broadminded tolerance. To charge Walter Scott with "pampering a depraved mental appetite" and with exciting "a disrelish for the existing scenes of nature"³ was not worthy of his great and many-sided mind. Here, as in his denunciation of the use of hymns in public worship,⁴ he gave way to personal prejudice, which he rarely did. He did not enjoy novels and he was old-fashioned in his attitude to hymns, and he forgot to apply his own principles in discussing such matters. That he was deficient in a sense of humour is obvious even in a cursory reading of his books. But these are surely small inconsistencies in the teaching of a great and original Christian thinker, whose chief characteristics were his vast store of learning, his transparent sincerity, his progressive and enlightened outlook on life, his insistence on the central truth of the Gospel that God is Love and the imperative need for the rule of love in the lives of professing Christians.

¹ *Philosophy of Religion*, p. 609.

² *Ibid.*, p. 611.

³ *Ibid.*, pp. 515-6.

⁴ *Ibid.*, p. 308.